Claims

1 1. A process for quantifying risk, excess return and correlation of a private portfolio

2 comprising,

3 determining the risk of a private investment portfolio relative to the public market, the

4 correlation of a private investment portfolio to the public market and the excess return of

5 a private market portfolio over the public market by the steps of:

6 (a) determining the internal rate of return of each investment in the private

7 investment portfolio;

8 (b) determining an index comparison return (ICM) for each investment in the

9 private investment portfolio;

10 (c) determining the private investment characteristics by plotting the values of (a)

11 and (b) as points in a scatter plot with (a) on the y-axis and (b) on the x-axis and applying

12 least squares linear regression to the resulting plot to yield a linear equation in the form y

13 $= \beta x + \alpha$, where β is the slope of the regression line and α is the point at which the

14 regression line crosses the y axis, and a value for R^2, the coefficient of determination;

15 (d) determining the correlation of the private market portfolio with the public

16 market by taking the square root of the coefficient of determination determined in (c) to

17 yield the coefficient of correlation r;

18 (e) determining the risk (σ_{vc}) of the private market portfolio by reference to the

$$\frac{\beta_{vc}\sigma^2_{S\&P}}{r_{VC,S\&P}\sigma_{S\&P}} = \sigma_{VC}$$

19 risk of the public market by solving the equation   ;

20 (f) determining the excess return of the private investment portfolio over the

21 public markets by reference to the α of the linear regression line; and

22 (g) thus quantifying risk, excess return and correlation of a private portfolio.

1 2. The process of claim 1, further including determining the Sharpe ratio of the private

2 investment portfolio and comparing the Sharpe ratio of the private portfolio to the Sharpe ratio of

3 a public market.

1 3. The process of claim 1, wherein said process includes application of quantified risk,

2 excess return and correlation of a private portfolio to management of an investment portfolio.

1　4.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to selection of one or more investments.

1　5.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to asset allocation into a private investment.

1　6.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to sub-asset allocation within a private

3　investment portfolio.

1　7.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to pricing of private investment funds.

1　8.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to evaluation of private investment funds.

1　9.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to evaluation of a private investment fund

3　manager.

1　10.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to evaluation of funds of funds.

1　11.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to evaluation of a fund of fund managers.

1　12.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to evaluation of a portfolio of direct

3　investments.

1　13.　The process of claim 1, wherein said process includes application of quantified risk,

2　excess return and correlation of a private portfolio to evaluation of secondary interests.

1　14.　A system for investing in a private investment portfolio comprising,

2　　　means for determining the risk of a private investment portfolio relative to the public

3　　　market, the correlation of a private investment portfolio to the public market and the

4　　　excess return of a private market portfolio over the public market comprising:

5　　　　(a) electronic means for determining the internal rate of return of the private

6　　　　investment portfolio;

7　　　　(b) electronic means for determining an index comparison return (ICM) for the

8　　　　private investment portfolio;

13

9   (c) electronic means for determining the private investment characteristics by

10   plotting the values of (a) and (b) as points in a scatter plot with (a) on the y-axis and (b)

11   on the x-axis and electronic means for applying least squares linear regression to the

12   resulting plot to yield a linear equation in the form $y = \beta x + \alpha$, where β is the slope of the

13   regression line and α is the point at which the regression line crosses the y axis, and a

14   value for R^2, the coefficient of determination;

15   (d) electronic means for determining the correlation of the private market

16   portfolio with the public market by taking the square root of the coefficient of

17   determination determined in (c) to yield the coefficient of correlation r;

18   (e) electronic means for determining the risk (σ_{vc}) of the private market portfolio

19   by reference to the risk of the public market by solving the equation

$$\frac{\beta_{vc}\,\sigma^2_{S\&P}}{r_{VC,S\&P}\,\sigma_{S\&P}} = \sigma_{VC} \quad ;$$

20

21   (f) electronic means for determining the excess return of the private investment

22   portfolio over the public markets by reference to the α of the linear regression line; and

23   (g) electronic means for quantifying risk, excess return and correlation of a

24   private portfolio.

1   15.   A process for quantifying risk, excess return and correlation of a private portfolio by

2   analyzing the investment outcomes of the private investment portfolio, said process comprising,

3   determining the risk of a private investment portfolio relative to the public market, the

4   correlation of a private investment portfolio to the public market and the excess return of

5   a private market portfolio over the public market by the steps of:

6   (a) determining the internal rate of return of each investment in the private

7   investment portfolio;

8   (b) determining an index comparison return (ICM) for each investment in the

9   private investment portfolio;

10   (c) determining the private investment characteristics by plotting the values of (a)

11   and (b) as points in a scatter plot with (a) on the y-axis and (b) on the x-axis and applying

12   least squares linear regression to the resulting plot to yield a linear equation in the form y

13   $= \beta x + \alpha$, where β is the slope of the regression line and α is the point at which the

14   regression line crosses the y axis, and a value for R^2, the coefficient of determination;

15   (d) determining the correlation of the private market portfolio with the public

16 market by taking the square root of the coefficient of determination determined in (c) to

17 yield the coefficient of correlation r;

18   (e) determining the risk (σ_{vc}) of the private market portfolio by reference to the

$$\frac{\beta_{vc}\,\sigma^2_{S\&P}}{r_{VC,S\&P}\,\sigma_{S\&P}} = \sigma_{VC}$$

19 risk of the public market by solving the equation   ;

20   (f) determining the excess return of the private investment portfolio over the

21 public markets by reference to the α of the linear regression line; and

22   (g) thus quantifying risk, excess return and correlation of a private portfolio.